code pattern information is read and the size of the body
can be measured at the same time, so that an apparatus having
a simple constitution for reading the size of a body and code
pattern information can be provided.

5   As mentioned above, according to the present invention,
the length of a detection object can be detected precisely.

What Is Claimed Is

1. An apparatus for automatically detecting a size of

10   a detection object comprising:

a detection object whose size is to be detected;

a background panel which is arranged behind said detection
object, said background panel having a mark as a standard
and being longer than said detection object; and

15   a controller for optically scanning said detection object
and said background panel from forth, and automatically
detecting the size of said detection object on the basis of
a signal obtained by electrically converting reflected light.

2. An apparatus for automatically detecting a size of

20   a detection object comprising:

a detection object whose size is to be detected;

a background panel arranged behind said detection object,
said background panel having a mark as a standard and a code
pattern arranged along a length direction of said detection

25   object, and being longer than said detection object; and

a controller for optically scanning said detection object and said background panel from forth and automatically detecting the size of said detection object on the basis of a signal obtained by electrically converting reflected light.

5　　3. An automatic analyzer comprising:

an analytical unit for analyzing components of a sample which is an analytical object using a reagent, a reagent container for storing said reagent;

a sampler unit for holding said sample and executing a

10　pouring operation so as to transfer said sample of a volume necessary to analysis to said analytical unit; a controller for controlling said analytical unit and said sampler unit; and

a power unit for supplying power necessary for operations

15　of said controller, said analytical unit, and said sampler to said respective units,

wherein an optical information reader for reading contents of a code pattern label attached to a container for storing said sample for an object of discrimination is

20　installed, and a background panel having a mark as a standard is installed behind said container, and means for optically scanning said background panel and said code pattern by said optical information reader, measuring a height of said container with said code pattern attached on the basis of

25　a signal obtained by electrically converting reflected light,

and transmitting a result indicating said measured height
of said container and discrimination information of said code
pattern to said controller is provided.

4. An automatic analyzer comprising:

5   an analytical unit for analyzing components of a sample
which is an analytical object using a reagent;

        a reagent container for storing said reagent, a sampler
unit for holding said sample and executing a pouring operation
so as to transfer said sample of a volume necessary to analysis

10   to said analytical unit, a controller composed of an electron
circuit including an MPU, a memory, an I/O unit, and a sequencer
for processing information and a storage unit for controlling
said analytical unit and said sampler unit, and a power unit
for supplying power necessary for operations of said

15   controller, said analytical unit, and said sampler to said
respective units;

        wherein an optical information reader for reading
contents of a code pattern label attached to a container for
storing said sample for an object of discrimination is

20   installed, and a background panel having a mark as a standard
is installed behind said container, and means for optically
scanning said background panel and said code pattern by said
optical information reader, measuring a height of said
container with said code pattern attached on the basis of

25   a signal obtained by electrically converting reflected light,

and transmitting a result indicating said measured height of said container and discrimination information of said code pattern to said controller is provided.

5. An apparatus for automatically detecting a size of a detection object according to Claim 2, wherein said background panel includes an auxiliary symbol in a neighborhood of said mark as a standard.

6. An automatic analyzer according to Claim 3, wherein said background panel includes an auxiliary symbol in a neighborhood of said mark as a standard.

7. An automatic analyzer according to Claim 4, wherein said background panel includes an auxiliary symbol in a neighborhood of said mark as a standard.